

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER No. 90-152  
NPDES No. CA0005631

WASTE DISCHARGE REQUIREMENTS FOR:

PACIFIC GAS AND ELECTRIC COMPANY  
OLEUM FACILITY  
RODEO, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

1. Pacific Gas and Electric Company, Oleum Power Plant (hereinafter discharger) by application dated March 21, 1989 and Addendum dated October 15, 1990 has applied for reissuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES). The permit which expired on March 26, 1989 has remained in effect pursuant to the discharger's application for reissuance.
2. The discharger is currently not producing power at the subject plant. However, the discharger presently discharges into San Pablo Bay via a 30 feet wide by two feet deep channel (Lat. 38 2' 50", Long. 122 15' 40") a flow of 1.5 million gallons a day of non-contact bay water that contains no chemical additives, an estimated annual average flow of 50 gallons a day of treated storm water runoff from the past process areas and a presently estimated flow of 1 gallon a day of intermittent groundwater due to seepage. The treated storm water and groundwater effluents are discharged into the circulation water channel which is tributary to San Pablo Bay.
3. The discharger decided to discharge 1.5 million gallons a day of circulation water in order to maintain their legal right-of-way to discharge significant amounts of wastewater via the 30 feet wide by two feet deep channel under an agreement with Union Oil. In additionn, the the purpose of the circulation water is to maintain the continuity of the circulating water system structure and to discharge the intermittent flows. Without continuous flow, groundwater seepage and storm water would stagnate, and the intake could permanently silt in, preventing any future flushing. Union Oil owns the channel. The discharger took this action to protect their future consideration of power production at the facility.
4. The report of waste discharge describes the existing discharge as follows: Wastes 001: An annual average of 50 gallons a day of seasonal stormwater runoff from past plant process areas

and 1 gallon a day of intermittent groundwater due to seepage.

The waste is treated by clarification and sedimentation prior to discharge to the circulation water channel tributary to San Pablo Bay.

5. Storm water runoff from non-process areas and wastewater from different sumps, are discharged to the nearby Union Oil refinery and regulated under a separate permit issued to Union Oil by the Board. City water for sanitary needs are discharged into a leachfield.
6. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) in December 1986. The State Water Resources Control Board approved it in May 1987. The Basin Plan consists of water quality objectives for the San Pablo Bay and contiguous waters.
7. The beneficial uses of San Pablo Bay and contiguous water bodies are:
  - o Water contact recreation
  - o Non-contact water recreation
  - o Navigation
  - o Industrial service supply
  - o Ocean commercial and sport fishing
  - o Wildlife habitat
  - o Preservation of rare and endangered species
  - o Fish migration and spawning
  - o Estuarine habitat
8. Effluent limitation and toxic effluent limits established pursuant to Sections 301, 304, and 307 of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
9. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and policies, current plant performance, and best engineering judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.
10. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), in accordance with Section 13389 of the California Water Code.

11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
12. The Board in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Pacific Gas and Electric Company, Oleum Facility, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of process waste is prohibited.
2. The discharge of material spills to waters of the State is prohibited. Spills shall be promptly cleaned up to prevent mixing with subsequent stormwater runoff.
3. The discharge of cooling water to waters of the State is prohibited.
4. The addition of any wastes or chemicals to the circulation water is prohibited, except for waste 001.

B. Effluent Limitations

1. During periods in which Waste 001 is discharged, the discharge of this waste in excess of the following limits is prohibited after November 1, 1991, except as provided in Provision D-1.

<u>Constituent</u>	<u>Units</u>	<u>30-day Average</u>	<u>Maximum Daily</u>
Oil & Grease	mg/l	10	20
Total Suspended Solids	mg/l	30	100
Arsenic	ug/l		20
Cadmium	ug/l		10

Effluent Limitations cont'd.

Chromium (VI) *	ug/l	11
Copper	ug/l	20
Cyanide	ug/l	25
Lead	ug/l	5.6
Mercury	ug/l	1
Nickel	ug/l	7.1
Silver	ug/l	2.3
Zinc	ug/l	58

\* The discharger may meet this limit as total chromium.

2. The discharge of waste 001 shall not have a pH of less than 6.5 nor greater than 8.5.
3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY: The survival of three-spine stickleback and fathead minnow or sand dab in a 96-hour static bioassay shall achieve a median of 90% survival and a 90 percentile value of not less than 70% survival.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place.
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the surface:
- a. Dissolved oxygen      5.0 mg/l minimum - median for any three consecutive months not less than 80% saturation. When natural factors cause lesser concentration(s) than specified above, then discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. pH      Variation from natural ambient pH by more than 0.5 pH units
  - c. Un-ionized      0.025 mg/l Annual Median;  
Ammonia (as N)      0.4 mg/l Maximum at any time.
3. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such standards.

D. Provisions

1. The discharger shall perform a study to determine the feasibility to meet Effluent Limitations B.1, except for oil and grease and total suspended solids which shall be complied with immediately. Upon completion of the study the discharger shall take the steps necessary to comply with the effluent limitations of this Order or cease the discharge or document that an inordinate burden would be placed on the discharger relative to beneficial uses protected and that alternative effluent limitations or mitigation measures will ensure the protection of beneficial uses. These tasks shall be completed in accordance with the following time schedule:

<u>TASK</u>	<u>COMPLETION DATE</u>
Submit progress report of proposed study	April 1, 1991
Complete study	July 1, 1991
Achieve compliance with all effluent limitations B.1 of Order or submit documentation for alternative limits.	November 1, 1991

2. Neither the discharge nor its treatment shall create a nuisance or pollution as defined in Section 13050 of the California Water Code.
3. The discharger shall comply with a Self-Monitoring Program as adopted by the Regional Board, and as may be amended by the Executive Officer.
4. The requirements prescribed herein do not authorize the commission of any act causing injury to property of another, nor protect the discharger from his liabilities under federal, state or local laws, nor guarantee the discharger a capacity right in the receiving waters.
5. In the event of any change in control or ownership of land or waste, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.

6. The discharger shall permit the Regional Board:
  - (a) Entry upon premises where an effluent source is located or in which any required records are kept;
  - (b) Access at reasonable times to copy any records required to be kept under terms and conditions of this Order;
  - (c) Sampling at reasonable times of any discharge.
7. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.
8. After notice and opportunity for a hearing, this Order may be modified, suspended, or revoked, in whole or in part, during its term for cause including, but not limited to, the following:
  - (a) Violation of any terms or conditions of this Order;
  - (b) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
  - (c) A temporary or permanent reduction or elimination of the authorized discharge; or,
  - (d) A change in character, location or volume of discharge.

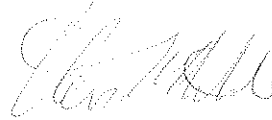
This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (c), and (D), 303 304(b) (2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- (b) Controls any pollutant not limited in the permit.

9. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency (40CFR 122.41K).
10. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the discharger must notify the Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.
11. The discharger shall review and update by November 1 each year its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a wilful and negligent violation of this Order pursuant to section 13387 of the California Water Code.
12. The discharger shall comply with all provisions of this Order immediately upon adoption, except as provided by provision D.1.
13. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 84-10. Order No. 84-10 is hereby rescinded.
14. This Order expires on December 12, 1995 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such data as application for issuance of new waste discharge requirements.
15. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December 1986.
16. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall take effect at the end of 10 days from date of adoption provided the Regional Administrator, Environmental Protection Agency, has no Objections. If the Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.



I, Steven R. Ritchie, Executive Officer do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on December 12, 1990.



STEVEN R. RITCHIE  
Executive Officer

Attachments:

- o Self Monitoring Program
- o Standard Provisions & Reporting  
Requirements, December 1986
- o Resolution 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

PACIFIC GAS & ELECTRIC COMPANY  
OLEUM FACILITY  
RODEO, CONTRA COSTA COUNTY

NPDES NO. CA0005631

ORDER NO. 90-152

SMP CONSISTS OF

PART A, dated December, 1986

AND

PART B, Odered December 12, 1990

PART B

DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF  
ANALYSES AND OBSERVATIONS

I. Sampling Station Location/Description

EFFLUENT

Station

Description

E-001

At any point in the waste stream  
before it mixes with the  
circulation water.

II. Monitoring

The following shall constitute the monitoring program:

<u>Station</u>	<u>Constituent</u>	<u>Units</u>	<u>Type of Sampling</u>	<u>Minimum Frequency of Analyses</u>
E-001	Oil & Grease	mg/l	grab	monthly **
	Total Suspended Solids	mg/l	grab	monthly **
	pH	pH	grab	monthly **
	96-hour fish bio-	% sur- vival	grab (1)	quarterly **
	Arsenic	ug/l	grab	monthly **
	Cadmium	ug/l	grab	monthly **
	Chromium (VI)	ug/l	grab	monthly **
	Copper	ug/l	grab	monthly **
	Cyanide	ug/l	grab	monthly **
	Lead	ug/l	grab	monthly **
	Nickel	ug/l	grab	monthly **
	Silver	ug/l	grab	monthly **
	Zinc	ug/l	grab	monthly **

## LEGEND

### FREQUENCY OF ANALYSIS

Monthly = Once each month  
Quarterly = Once every 3 months  
\*\* = When discharging

### FOOTNOTE

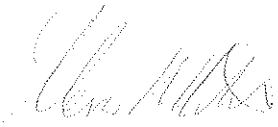
- (1) The bioassay: The survival of three-spine stickleback and fathead minnow or sand bad in a 96-hour static bioassay shall achieve a median of 90% survival and a 90 percentile value of not less than 70% survival.

### III. Reporting

Self-Monitoring Reports shall be filed every third month by the fifteenth day of the following month, unless no discharge has occurred.

I, Steven R. Ritchie, Executive Officer, hereby certify that the following Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 90-152.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

  
STEVEN R. RITCHIE  
Executive Officer

Effective Date: December 12, 1990